

**Amendment to the CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously presented) A process for manufacturing a radiation heating structure, the structure comprising:

- a heating layer comprising at least one electrical resistor intended to be electrically powered in order to produce Joule heating;

- a radiating layer; and

- a substantially thermally insulating layer,

the insulating layer and the radiating layer being fixed on either side of the heating layer,

wherein:

- a) a laminate comprising at least said electrical resistor and reinforcements is introduced into a mold; and

- b) injected into the mold:

- via an opening formed in a first wall of the mold opposite one face of the laminate intended to form the radiating layer, is a first resin that is filled with radiating additives and can be cured in the mold; and

- via an opening formed in a second wall of the mold opposite one face of the laminate intended to form the insulating layer, is a second resin that is more fluid than the first resin and can be cured in the mold.

2. (Previously presented) The process as claimed in claim 1, wherein said mold is a pultrusion mold having an entry end and an exit end and wherein, in step b), said laminate is made to advance between the two ends of the mold while said first and second resins are being injected, said advance being sufficiently rapid to limit any diffusion of the radiating additives into the second wall of the mold.

3. (Previously presented) The process as claimed in claim 2, wherein the respective injection rates of the first and second resins are chosen according to the speed of advance of said laminate through the mold and so as to limit any diffusion of the radiating additives into said second wall of the mold, while ensuring diffusion of the radiating additives into the heating layer.

4. (Previously presented) The process as claimed in claim 1, wherein said laminate furthermore includes a thermal insulator intended to be embedded in the second resin, this thermal insulator being placed, in said laminate, facing said second wall of the mold in order to form said insulating layer.

5. (Currently amended) The process as claimed in claim 1, wherein, when the insulating layer and the radiating layer are each reinforced, said laminate comprises:

- [-] reinforcements;
- [-] at least one electrical resistor; and
- [-] reinforcements.

6. (Currently amended) The process as claimed in claim 5, taken in combination with claim 4, wherein said laminate comprises:

- [-] reinforcements;
- [-] at least one electrical resistor;
- [-] reinforcements; and
- [-] a thermal insulator.

7. (Currently amended) The process as claimed in ~~either of claims~~ claim 4 and 6, wherein the thermal insulator is a sheet of mineral wool, such as rock wool.

8. (Current amended) The process as claimed in ~~one of the preceding claims~~ claim 1, ~~in which~~ wherein the second resin includes insulating additives.

9. (Previously presented) The process as claimed in claim 1, wherein the radiating additives are plaster particles.

10. (Previously presented) The process as claimed in claim 1, wherein said reinforcements are fibers, such as glass fibers.

11. (Previously presented) The process as claimed in claim 1, wherein said electrical resistor consists of a network of metal wires.

12. (Previously presented) The process as claimed in claim 1, wherein said electrical resistor consists of a fabric of at least partly electrically conductive fibers.

13. (Previously presented) The process as claimed in claim 1, wherein said electrical resistor consists of a screen-printed film.

14. (Previously presented) The process as claimed in claim 1, wherein said first and second resins are thermoplastics.

15. (Currently amended) A mold for implementing a process for manufacturing a radiation heating structure, wherein the mold comprises:

[-] a first wall and a second wall opposite said first wall;

[-] first means for injecting a first resin, which can be cured in the mold and is filled with radiating additives, via a first opening in the mold formed in said first wall; and

[-] second means for injecting a second resin, which can be cured in the mold and is more fluid than the first resin, via a second opening formed in said second wall.

16. (Previously presented) The mold as claimed in claim 15, wherein it furthermore includes an entry end and an exit end in order to implement said process by pultrusion.

17. (Currently amended) A radiation heating structure, wherein it comprises at least:

[-] a heating layer comprising at least one electrical resistor intended to be electrically powered in order to produce Joule heating;

[-] a radiating layer, comprising predominantly radiating additives; and

[-] a thermally insulating layer,

the insulating layer and the radiating layer being placed on either side of the heating layer.

18. (Previously presented) The heating structure as claimed in claim 17, wherein the structure is substantially in the form of a sheet, with an insulating face and, opposite it, a radiation heating face.

19. (Previously presented) The heating structure as claimed in claim 17, wherein the insulating layer and the radiating layer include reinforcing fibers.